

O'Brien, P.E. and J.H. Potter. University of Maryland, College Park, Maryland. Courtship behavior in two strains of *D. melanogaster*.

A comparative analysis was made of the courtship behavior of two strains of wild type *D. melanogaster*. One strain was obtained from the Genetics Research Unit, Carnegie Institution, Cold Spring Harbor, New York. The other strain was derived from flies taken in the

wild near Chester, Vermont. Both strains were carried by mass subculturing for nine months before the study was initiated.

Between 17 and 28 single pair matings of 3-5 day old virgins of the same strain were observed. The data were quantified on the basis of the following parameters: (1) time before courtship, time between placement of the pair in the mating chamber and the first display by the male; (2) duration of courtship, time between the initial display and the mount; (3) wing vibration time, cumulative time spent in wing display by the male; (4) duration of mount, time spent by male in mounted position.

The Wilcoxon two sample test was used to analyze the statistical significance of the differences observed between the two populations. Statistically significant differences between the populations were demonstrated for 3 parameters: time before courtship, $p < .001$; duration of courtship, $p < .02$; total wing vibration time, $p < .05$. Differences in the duration of the mount between the two populations were not statistically significant.

Mather, Wharton B. University of Queensland, Australia. The genus *Drosophila* at Mt. Maquiling, Luzon, Philippines.

In February 1969 the genus *Drosophila* was sampled from fermenting banana baits. The baits were placed in lush vegetation on the slopes of the mountain.

The primary sorting of the flies yielded the results shown in Table I, and a sample of

females from the melanogaster group when individually bred out, gave the results in Table II determined from males.

TABLE I
Primary Sorting

Species	Number	% of total
<i>D. setifemur</i>	134	13.7
<i>D. pararubida</i>	49	5.0
<i>D. quadrilineata</i>	3	0.3
melanogaster group	789	80.6
	<u>975</u>	

Table II
melanogaster group sample

Species	No.	% of mel. gr.	% of total
<i>D. malerkotliana</i>	49	14.3	11.6
<i>pseudoananassae</i>	14	4.1	3.3
<i>D. bipectinata</i>	2	0.6	0.5
<i>D. takahashii</i>	54	15.8	12.7
takahashii-like	5	1.5	1.2
<i>D. gracilis</i>	36	10.6	8.6
melanogaster group sp.	1	0.3	0.2
<i>D. montium</i>	2	0.6	0.5
montium subgroup sp. I	3	0.9	0.7
montium subgroup sp. II	4	1.2	1.0
<i>D. truncata</i>	32	9.4	7.6
rufa-like	<u>140</u>	40.1	32.3
	<u>342</u>		

It will be noted that the melanogaster group is very dominant. The immigrants group is represented by *D. pararubida* and *D. setifemur*. This is a similar situation to that in Sabah (Mather, 1968).

Cultures of the species from this collection have been preserved and are being studied in relation to cultures of the species from Sabah, New Guinea and Australia as regards chromosomal variation and reproductive isolation.

Reference: Mather, Wharton B. The genus *Drosophila* in Sabah. D.I.S. 43: 100.